

Space Weather Models, Tools and Services at the Community Coordinated Modeling Center.

*M. M. Kuznetsova, M. Hesse, M. Maddox, L. Rastaetter, D. Berrios, A. Pulkkinen, Y. Zheng, P. J. MacNeice, J. Shim, A. Taktakishvili, A. Chulaki*

The Community Coordinated Modeling center (CCMC) is a multi-agency partnership to support the research and developmental work necessary to substantially increase space weather modeling capabilities and to facilitate advanced models deployment in forecasting operations. The CCMC conducts unbiased model testing and validation and evaluates model readiness for operational environment. Space weather models and coupled model chains hosted at the CCMC range from the solar corona to the Earth's upper atmosphere. CCMC has developed a number of real-time modeling systems, as well as a large number of modeling and data products tailored to address the space weather needs of NASA's robotic missions. The presentation will demonstrate the rapid progress towards development the system allowing using products derived from space weather models in applications associated with National Space Weather needs. The adaptable Integrated Space Weather Analysis (ISWA) System developed at CCMC for NASA-relevant space weather information combines forecasts based on advanced space weather models hosted at CCMC with concurrent space environment information. The system is also enabling post-impact analysis and flexible dissemination of space weather information.